Development of WMS Capabilities to Support NASA Disasters Applications and App Development

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ABSTRACT

During the last year several significant disasters have occurred such as Superstorm Sandy on the East coast of the United States, and Typhoon Bopha in the Phillipines, along with several others. In support of these disasters NASA's Short-term Prediction Research and Transition (SPoRT) Center delivered various products derived from satellite imagery to help in the assessment of damage and recovery of the affected areas. To better support the decision makers responding to the disasters SPoRT quickly developed several solutions to provide the data using open Geographical Information Service (GIS) formats. Providing the data in open GIS standard formats allowed the end user to easily integrate the data into existing Decision Support Systems (DSS). Both Tile Mapping Service (TMS) and Web Mapping Service (WMS) were leveraged to quickly provide the data to the end-user. Development of the deliver methodology allowed quick response to rapidly developing disasters and enabled NASA SPoRT to bring science data to decision makers in a successful research to operations transition.